



US Army Corps  
of Engineers  
New England District

# Update Report for Rhode Island



Current as of  
July 31, 2000

696 Virginia Road, Concord, Massachusetts 01742-2751  
Public Affairs Office, 978-318-8264

Home Page: <http://www.nae.usace.army.mil/publicac/publicac.htm>

## Mission

The missions of the New England District, U.S. Army Corps of Engineers include flood prevention and control, emergency response for natural disasters and national emergencies, environmental remediation and restoration, natural resource management, stream bank and shoreline protection, navigation maintenance and improvement, support to military facilities and installations, and engineering and construction support to other federal agencies. The six New England states cover 66,000 square miles and have 6,100 miles of coastline, 11 deep water ports, 102 recreational and small commercial harbors, 13 major river basins, and thousands of miles of navigable rivers and streams. The district operates and maintains 31 dams, 2 hurricane barriers and the Cape Cod Canal. We employ about 550 professional civilian employees, with about 400 stationed at our headquarters in Concord, Massachusetts. The other Corps of Engineers employees serve at Corps projects and offices throughout the region.

Index	
Defense Environmental Restoration	2
Flood Plain Management	4
Navigation	1
Planning Assistance	4
Regulatory Program	1
Special Studies	5
Superfund	3

## Navigation

**PROVIDENCE RIVER (1st & 2nd CDs)** - A hydrographic condition survey of the federal navigation project, completed in 1992, showed substantial shoaling in upstream areas of the channel. An Interagency Task Force to preserve shipping in Narragansett Bay and develop a plan for dredging the Providence River channel and other projects was created, with the New England District serving as an advisory participant. The Task Force reported that dredging is needed and created a partnership among state and federal agencies and the many interests involved in dredging.

A Draft Environmental Impact Statement (DEIS) was issued for public review in 1998. Public Hearings on the DEIS were held last October 8th and 9th. Close to 300 people spoke at the hearings, with the majority questioning the preferred alternative (an upriver Confined Aquatic Disposal (CAD) site for disposal of dredged sediments that are unsuitable for open-water disposal, with suitable material being placed at an open water site within Narragansett Bay). Work is currently underway on preparation of the Final Environmental Impact Statement (FEIS) that addresses the questions raised concerning the DEIS and reevaluates the disposal

alternatives. *Significant additional testing and modeling is underway to address comments received on the DEIS.*

*A work plan outlining the additional effort planned for the FEIS was coordinated with the EIS Cooperating Agencies and the RI Coastal Resources Advisory Council (CRAC). The schedule developed for the FEIS anticipates completion in the spring of 2001. Assuming the FEIS adequately addresses pertinent concerns, a Record of Decision would be prepared. The earliest that dredging could start would be 2002.*

*We are maximizing public involvement in the process and are meeting regularly with the stakeholder groups. A Cooperating Agency meeting was held in mid-April, and a CRAC meeting was held in late May. Additional public meetings will be held as work progresses.*

**BLOCK ISLAND (2nd CD)** - *Work to remove about 40,000 cubic yards of material from the channel and anchorage at the Harbor of Refuge on Block Island was completed at the end of June.*

## Regulatory Program

**STATISTICS** - *At the end of March there were 62 active applications for regulated work in Rhode Island. During April, May, and June, 42 new applications were received. Final actions were taken on 50 applications, including two individual permits, 33 general permits, one not required, and no denials. The balance at the end of June was 54 active*

*files. The New England District routinely processes 95% of all permit applications in less than 60 days.*

Department of the Army permits are required from the Corps of Engineers under Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. The Corps

reviews permit applications for work affecting navigable waters under our Section 10 authority and the discharge of fill material into all waters, including inland wetlands, under Section 404.

**PROVIDENCE RIVER DREDGING PROJECT (1st & 2nd CDs)**- We are reviewing the request of 20 marine facilities to perform dredging of approximately 555,000 cubic yards of sediments from areas throughout Rhode Island, requesting

to use the site selected for disposal of material from the federal project. These facilities are being evaluated in the Environmental Impact Statement being prepared for the Corps maintenance (O&M) dredging of the Providence River federal channel. Therefore, they are also being included in the CRMCs study and analysis of potential short-term, in-water disposal sites in Narragansett Bay. A draft of this environmental report has been prepared by the CRMC and is currently being reviewed by our staff and the other federal resource agencies.

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## Defense Environmental Restoration Program

This Congressionally directed program (PL 98-212) provides for an expanded effort in environmental restoration. It emphasizes the identification, investigation and prompt cleanup of hazardous and toxic waste; unexploded ordnance; buildings and other structures and debris at current and former military facilities. A total of 85 formerly used Defense sites have been identified in Rhode Island. Investigations at all 85 sites are now complete, including 53 where no work was found to be necessary.

### \* QUONSET POINT, DAVISVILLE and NORTH KINGSTOWN (2nd CD).

**NIKE PR-58 Site.** Remedial Investigations were nearing completion in the spring of 1998 when work was put on hold pending the results of the Navy's remedial investigation on the adjacent property. Up to this point, the Corps investigations of the overburden showed limited soil contamination. The results of that Navy study indicated that a deep Chlorinated Volatile Organic Compound (CVO) plume (bedrock zone) exists, and the source location is from the NIKE property. In ongoing coordination with the Rhode Island Department of Environmental Management, the U.S. Environmental Protection Agency and the Navy, it was determined that additional characterization of the deep plume was required. A Scope of Work was prepared and issued to the architect-engineer to sample up to 22 new monitoring wells. The work was awarded to EA Engineering during the fourth quarter of FY99. RIDEM and USEPA requested changes to the workplan, and a modification to expand the scope was negotiated in February 2000. *Drilling is now underway.*

**Keiffer Park Site** - *A feasibility study will be completed this fiscal year.* An interim remedial action will follow to remove Light Non-Aqueous Phase Liquid (LNAPL) from the site which formerly contained six 650,000 gallon capacity underground fuel storage tanks.

**Blue Beach Site** - The remedial action project (\$1.7 million) to remove PCB-contaminated soil and pave a contaminated area was completed in the summer 1999. Additional PCB contaminated soil was confirmed in the summer of 1999. Sampling has been completed and remediation is awaiting funding.

**Electric Boat Facility, Building 480 Site** - A contract has been awarded to perform a Pilot Study for the remediation of free product. *A contract to perform removal of free product is ready for award, pending availability of funding.*

**PRP Site** - EMCON (Wallingford, Conn.) is investigating the Electric Boat (EB) site under a comprehensive cost-sharing agreement between EB and the Corps. The New England District recently amended the cost-sharing agreement with Electric Boat to cover the cost associated with additional site characterization. That site characterization is ongoing and is scheduled for completion this Fiscal Year.

**Devils Foot Road Site** - Phase II of the Engineering Evaluation of Contamination is complete, and remediation alternatives are currently being discussed with RIDEM. *Award of the first phase of a remediation contract was made in June to Nobis Engineering, Inc., for \$77,883.*

**Quarry Disposal Site**- The Baseline Human and Ecological Risk Assessment Report was completed and sent to RIDEM. However, the surface water pathway, which was not addressed in the report, may need to be revisited in coordination with RIDEM.

**Atlantic Shellfish Site** - R.F. Weston is presently working on a remedial investigation to clarify the type and extent of contamination on site. Work is on hold, pending discussions with RIDEM, due to low priority and lack of funding.

**Camp Avenue Dump Site** - The New England District is conducting long-term monitoring of groundwater and surface water, following the installation of a soil cap in the spring of 1998. Since then, quarterly rounds of long-term monitoring have been conducted and data reports are sent to RIDEM and RIEDC. Biannual monitoring will continue until the spring of 2003.

\* **OTHER INVESTIGATIONS** - RIDEM has requested that we expand our investigation at the former Newport Naval Base in **Newport (1st CD)** to include additional sites they believe qualify under the FUDS program for remediation. A meeting was held on March 28, 2000, to discuss these areas. *A site visit has been made and an Initial Project Report amendment is being developed.* At present only an HTRW project has been approved for sampling of soil at the

STP Sludge Drying Bed at the Melville Marine Industries. This project will be performed when priorities and funding allow.

The Engineering Evaluation of Contamination Phase II for Gould Island, **Narragansett (2nd CD)**, was initiated, but has been put on hold pending discussion with RIDEM on the scope of further investigations. Work will continue as priorities and funding allow.

Discussions are being held with Rhode Island DEM to determine what remaining work needs to be accomplished at Hope Island, **Jamestown (1st CD)**, to achieve site closure.

Remedial investigations and feasibility studies are underway for a project at **Charlestown (2nd CD)** Naval Auxiliary Landing Field. Remediation alternatives and additional site characterization are being discussed with the Rhode Island Department of Environmental Management (RIDEM). The latest remedial investigation reports have been received and are being reviewed.

Tank removal work at the Naval Auxiliary Air Facility, **Westerly (2nd CD)**, and the Escoheag Naval Recreation Camp, **Exeter (2nd CD)**, along with demolition work at **NETC Newport (1st CD)**; Dutch Island, **Jamestown (1st CD)**; Fort Nathaniel Greene, **Narragansett (2nd CD)**; and **Charlestown (2nd CD)** Naval Auxiliary Landing Field will be performed when priorities and funding allow.

\* **REMEDATION is underway** at the following locations:

#### First District

**Hope Island, Jamestown**

**Prudence Island**

#### Second District

**Quonset Point, Blue Beach**

**Quonset Point Atlantic Shellfish, North Kingstown<sup>1</sup>**

**Quonset Point Aqua Tank Farm, North Kingstown**

<sup>1</sup> Closure of an oil/water separator system, cleaning a catch basin and trench, and removal of a transformer platform and pad is complete under a \$45,120 purchase order. Additional investigations for PCB contamination is contemplated.

\* **REMEDATION is complete** for the following:

#### First District

Army Reserve Center in **Lincoln**, \$24,310

Nike Site, **Bristol**, \$107,690

Fort Adams, **Newport**, \$1,268,176

Beavertail Point Naval Communications Station, **Jamestown**, \$12,770

**Prudence and Rose islands, Portsmouth and Newport**, \$363,000

Fort Church, **Little Compton<sup>1</sup>**

Fort Wetherill, **Newport<sup>1</sup>**

Sachuest Point, **Newport<sup>1</sup>**

Rose Island, **Newport<sup>1</sup>**

Fort Wetherill, **Jamestown<sup>2</sup>**

Sachuest Point, **Newport<sup>2</sup>**

Fort Getty, **Jamestown<sup>2</sup>**

Beavertail Point Naval Communications Station, **Jamestown<sup>2</sup>**

Prospect Hill Fire Control Station, **Jamestown<sup>2</sup>**

Camp Avenue Dump Site, **Davisville** (\$546,138)

Hull Cove Fire Control Station, **Jamestown**

#### Second District

T.F. Green Airport, **Warwick**, \$60,773

Nike Site PR-79, **Foster**, \$92,150

Devil's Foot Road, **Quonset Point**, \$334,000

**Quonset Point NAS**, Nike PR-58, \$148,010

Nike Site, **Coventry**, \$142,575

Building, pier and pool demolition, **North Kingstown**, \$530,000

<sup>1</sup> These four projects for the removal of tanks were accomplished under the terms of a \$44,152 contract.

<sup>2</sup> These five activities, involving demolition and debris removal, were accomplished under the terms of a \$1,218,639 contract.

In addition, remediation contracts, totalling \$7.5 million, have been completed for several projects at **Quonset Point Naval Air Station (2nd CD)** and **Charlestown (2nd CD)**. These efforts included the removal of a total of 124 tanks, ranging in size from 1,000 to 25,000 gallons, cleaning and slurring of three miles of pipeline, and removal of 20 transformers.

## Work for the Environmental Protection Agency

The New England District is the Corps of Engineers' total support agency for the Environmental Protection Agency's Region I (New England) program for those federal-lead projects assigned to the Corps by EPA. This includes responsibility for design and/or construction execution of remediation projects. In addition, the District is providing technical assistance upon request to Region I for other federal-lead projects assigned by EPA to private firms as well as for some potentially responsible party (PRP) remediation.

#### **CENTREDALE MANOR, NORTH PROVIDENCE (1st CD)**

- The Centredale Manor Restoration Superfund Site consists of property located along Route 44 in North Providence and a section of the adjacent Woonasquatucket River and its associated ponds and floodplain. The property was previously occupied by a chemical company and a drum reclamation company, which were in operation from the 1940s to the early 1970s. All buildings on the property were demolished in the mid-1970s. Roadway, parking lots and two high-rise residential buildings that were constructed in the late 1970s and early 1980s currently cover the property. Elevated levels of dioxin, PCBs, chlorinated solvents and other com-



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*pounds have been found in soils at the property and in soils and sediments downstream of the property.*

*The New England District recently designed temporary caps for contaminated soils on the property and completed a flood inundation study at the Site. Currently NAE is providing technical and contractual assistance for an Ecological Risk Assessment and is conducting a hydraulic study. This information will be used to support a cleanup effort to be documented in EPA's Record of Decision.*

**SMITHFIELD (1st CD)** - The 15-acre Davis Liquid Waste Superfund Site was used during the 1970s as a disposal location for various hazardous liquid and solid chemical wastes. Liquid wastes accepted at this site, both in drums and in bulk tank trucks, were dumped directly into unlined pits in the ground. From these sources, contamination of surrounding soils and surface and groundwater occurred and still persists today. In 1978, in response to the discovery of off-site contamination in private residential and monitoring wells, the Rhode Island Superior Court issued a permanent injunction against dumping of hazardous substances on the Davis property. Presently, the site operates mainly as a staging and storage area for 30 to 35 million tires.

In 1987, the EPA Regional Administrator signed the Record of Decision for site remediation. The selected remedy includes excavation of an estimated 25,000 cubic yards of waste and contaminated soils and treatment on-site in a mobile thermal treatment facility; construction of an on-site water treatment plant for active restoration of the overburden and bedrock aquifers contaminated with volatile organic compounds; and construction of an alternative water supply (waterline) to residents affected by contaminants migrating off-site in groundwater into private wells.

At EPA's request, the Corps performed a predesign study which included site surveys and mapping, pilot treatability tests, drilling and sampling, installation of groundwater monitoring and observation wells, aquifer pump tests, and analysis of soil, sediment and water samples. The design of a groundwater treatment system was initiated in 1993 and was placed on hold by EPA due to changing site conditions. EPA negotiated with the Potentially Responsible Parties (PRP) to

complete the soils portion of the remedy. A settlement with the PRPs was reached and finalized in 1998. The Remedial Action was started in October 1999 and is scheduled for completion in early 2001. The Corps is providing construction oversight.

EPA implemented the alternative water supply in two phases. Phase one involved the installation of the distribution piping and majority of service connections to the residents affected by the contaminated groundwater emanating from the site. This phase was completed by an EPA contractor. Phase two involved modifying the Town of Smithfield's water distribution system so that it has the capability to deliver water to the affected residents. The modifications include the rehabilitation of an existing pump station, construction of two new pump stations, completing the tie-in of the new system and completing the tie-ins to the affected residents. EPA requested that the New England District assume the lead role in implementing the Remedial Action. A contract was awarded in 1996 to Process Construction Management of East Greenwich, R.I., for \$1,781,925. Work was completed in 1998. The final cost of the project was \$2.2 million.

**PICILLO FARM, COVENTRY (2nd CD)** - The Picillo Farm site is located in a rural residential area of the Town of Coventry. A 7.5-acre area on the farm served as an illegal disposal location for a variety of drummed and bulk liquid wastes in the mid 1970s. In the early 1980s, EPA and the State removed 10,000 drums of waste from the site. In 1988, stockpiled soil contaminated with PCBs was also removed by EPA and the State. High groundwater contamination still exists in an approximately 35-acre plume.

Under the 1993 EPA Record of Decision, contaminated soil will be treated via in-situ soil vapor extraction. Groundwater will be extracted and treated with air stripping and ultraviolet/chemical oxidation. At EPA's request, the Corps is providing oversight of the Picillo PRP Group's design and construction cleanup effort. The installation of the soil vapor extraction wells is complete and a groundwater treatment plant has been constructed. Testing of the treatment plant is ongoing. The Corps continues to provide technical assistance and construction oversight.

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## Planning Assistance to States

**TURNER RESERVOIR, EAST PROVIDENCE (1st CD)** - The City of East Providence requested the New England District to conduct an investigation to evaluate the potential of the Turner Reservoir and Central Pond wellfields as the City's long-term backup water supply. The study will also

investigate the suitability of permitting recreational use at the Turner Reservoir. *The \$84,000 study which is cost shared equally with the city of East Providence began in June 1999 and will be completed this fall.*

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## Flood Plain Management Services

**BAKER STREET BROOK STORM WATER STUDY, WEST WARWICK (2nd CD)** - The town of West Warwick experiences flooding and surface drainage problems associated with the Baker Street watershed. The existing drainage system is hydraulically inadequate. The RI Department

of Administration and the Town has requested the Corps assistance in solving this problem.

Study tasks include providing topographic mapping and aerial photography of the area and conducting an analysis of

the existing system and recommending improvements. The base mapping was completed in March 1999. The Corps detailed the existing drainage system and developed a storm water model for the Baker Street area. *This study is being conducted under the Corps Flood Plain Management Services Program and is 100 percent federally funded. We expect to release a draft report to the town in August 2000.*

**WOONASQUATUCKET RIVER, PROVIDENCE AND NORTH PROVIDENCE (1st and 2nd CDs)** - The U.S. Army Corps of Engineers, New England District, was requested by the city of Providence, Rhode Island to evaluate flooding issues along the Woonasquatucket River. This work will be

conducted under the Corps of Engineers Flood Plain Management Services (FPMS) program which is authorized under Section 206 of the Flood Control Act of 1960 (PL-86-645). This program is 100% Federally funded.

The purpose of the study is twofold: (1) to create a hydraulic model to investigate existing flooding problems and determine whether dredging and/or the removal of dams or other structures along the river would correct the problems; and (2) to assess the impact of a proposed wetlands/floodplain restoration project on flood levels. The existing conditions model is complete and the next desired conditions will be modeled. A draft report is to be completed this summer.

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## Special Studies/Projects

**ALLENDALE DAM, NORTH PROVIDENCE (1st CD)** - The Army Corps of Engineers was authorized by Section 358 of the 1992 Water Resources Development Act (WRDA) of 1992 (PL 102-508) to replace the breached Allendale Dam on the Woonasquatucket River in North Providence. The dam was naturally breached in November 1991. Currently, repair of the breach is estimated at \$420,000. However, sediments behind the dam contaminated with dioxin are being analyzed to determine construction requirements. EPA is investigating the Centre Dale Manor site upstream under Superfund authority. Solution to that problem will guide long-term consideration at Allendale Dam. Costs for repair will undoubtedly rise pending identification and selection of appropriate remedial measures. Repair of the dam and remediation of the contamination is now being coordinated with EPA and the City of North Providence as part of the Centredale Manor Superfund Project.

**ALLINS COVE ENVIRONMENTAL RESTORATION PROJECT, BARRINGTON (1st CD)** - The New England District has initiated an investigation to restore degraded coastal wetlands at the mouth of Allins Cove. The project would also investigate erosion of the shoreline along Byway Road. *A Preliminary Restoration Report was approved by the Corps North Atlantic Division in March, and the feasibility study began this spring. The feasibility study will be completed in approximately one year. Under Section 1135, the \$160,000 feasibility study is 100% federally funded. The Rhode Island Coastal Resources Management Council is the nonfederal sponsor.*

**BLACKSTONE RIVER** - A reconnaissance investigation to assess environmental restoration of the Blackstone River was completed in 1997. The \$400,000 federally-funded reconnaissance focused on ecological needs in the Blackstone River watershed. The study identified the federal interest in environmental restoration plans for the Blackstone River, determined the costs of constructing the proposed actions, and assessed the level of interest of potential cost-sharing sponsors for further, more detailed, investigations. A Feasibility Cost Share Agreement was signed by the Commonwealth of Massachusetts in May 1999. Rhode Island has been unable to allocate funds to initiate the feasibility study. Rhode Island has requested that

it be allowed to participate in the Feasibility Study at a later time, if funds become available.

**BOYD'S MARSH (TOWN POND) SALT MARSH RESTORATION, PORTSMOUTH (1st CD)** - The New England District received approval at the end of February 1998 to initiate a feasibility study for the restoration of up to 40 acres of salt marsh in the wildlife sanctuary at Boyd's Marsh. Boyd's Marsh is owned by the State of Rhode Island and managed by its Department of Environmental Management (DEM). The restoration would provide meaningful and productive ecological improvements to an area that can readily support increased populations of marine life. The DEM has been asked to approve an off-site disposal area before the report can be finalized.

**COASTAL AMERICA** - The Coastal America Northeast Regional Implementation Team (NERIT) has focused its efforts on habitat restoration and, in particular, restoration of tidally constricted salt marshes. An interagency Memorandum of Understanding has been signed to formally document the Coastal America partners' commitment to restoration projects in Rhode Island. The Corps has assisted these efforts at several sites throughout the state: the Galilee Bird Sanctuary Saltmarsh Restoration project has the support of numerous Coastal America partners; the Corps provided technical assistance to the National Oceanic and Atmospheric Administration's saltmarsh restoration evaluation for Sachuest Point; and the NERIT is also supporting the U.S. Fish and Wildlife Service's efforts to restore the Ninigret Sanctuary by working with the Army Reserves to remove asphalt from the abandoned airfield. *There are several Corps General Investigation studies underway to support habitat restoration as well.*

**INDIA POINT BRIDGE, SEEKONK RIVER, PROVIDENCE (1st & 2nd CDs)** - Authorization to demolish and remove the center span of the India Street Bridge was originally contained in the Water Resources Development Act (WRDA) of 1986 and later reauthorized at a higher cost in WRDA 1996. The Coast Guard declared the bridge a hazard to navigation and its owner, the City of Providence, subject to fine. The demolition of the bridge center span and removal of the sunken tugboat GASPEE would cost an estimated \$1.4

million. Revenue derived from the sale of scrap steel from the bridge will be credited toward the nonfederal share. The nonfederal sponsor, the City of Providence, must share 50 percent of the cost of the work. *The New England District conducted an underwater dive inspection of the center pier of the bridge in mid-July and completed draft project plans and specifications.* If there is not a bonafide purchaser, the title to the bridge must also be transferred from municipal ownership to the United States prior to removal. The City recently indicated that it had identified and devoted the funds necessary to participate in construction. *Accordingly, the Project Cooperation Agreement (PCA) between the US Army Corps of Engineers, and the City is scheduled to be executed in August 2000, and a contract is expected to be issued in September 2000. Construction is scheduled to start in December 2000.*

**LONSDALE DRIVE-IN WETLANDS RESTORATION, LINCOLN (1st CD)** - New England District initiated a Section 206 wetlands restoration project in 1998 for this former 41-acre drive-in site. Conceptual plans for the site were forwarded to interested parties in early April 1999. A new alternative has recently been added for consideration in response to U.S. Fish and Wildlife Service comments. *A meeting was held with the sponsor this spring to select a preferred alternative. A preliminary draft Ecosystem Restoration Report will be completed in August 2000.*

**NATIONAL ESTUARY PROGRAM** - The New England District has been requested to provide technical assistance to the Implementation Committee for National Estuary Program's Narragansett Bay Project (NBP). The NBP Comprehensive Conservation and Management Plan is complete. Goals of the National Estuary Program include identifying nationally significant estuaries that are threatened by pollution, development or overuse; promoting comprehensive planning for and conservation and management of these waters; encouraging the preparation of management plans, and enhancing the coordination of estuarine research. Our activities include attendance at committee meetings on water resource planning and transfer of data to the NEP Geographic Information System for their approval.

**RHODE ISLAND ECOSYSTEM RESTORATION STUDY (1st & 2nd CDs)** - In January 1999, the New England District initiated a reconnaissance investigation to examine opportu-

nities for environmental restoration of degraded salt marshes, freshwater wetlands, and anadromous fisheries. The area under study includes the Pawcatuck, Pawtuxet, Moshassuck, Ten Mile and Woonasquatucket river watersheds and the shoreline of Narragansett Bay. A Section 905(b) (reconnaissance study) analysis, identifying ecosystem restoration opportunities, was completed in July 1999 and approved in September 1999. *Draft of the Feasibility Cost Sharing Agreement and Project Study Plan that details the scope of further feasibility studies have been prepared, and were provided to Rhode Island officials in July 2000.*

**SOUTH COAST RECONNAISSANCE STUDY** - The Rhode Island South Coast Reconnaissance Study, begun in 1997, identified several opportunities for environmental restoration between Watch Hill in **Westerly and Narragansett (2nd CD)**. These included restoration of valuable aquatic habitat in the form of eelgrass, fish and shellfish in several salt ponds; improved nesting bird habitat through nourishment of the barrier beaches; restoration of fish passage in various locations; and restoring tidal flow to a constricted salt marsh. The \$880,000 feasibility investigation, initiated in 1998, is being cost-shared 50-50 between the federal government and the local sponsor. To date all of the hydrographic and topographic survey work has been completed, as well as winter flounder, sedimentation, bird, and benthic surveys. Water quality and eelgrass studies are about 90 percent complete. U.S. Fish and Wildlife Service has completed the fish passage designs. The investigation is slated for completion in March 2001.

**WOONASQUATUCKET RIVER DAM ASSESSMENTS** - The State of RI requested technical assistance by the Corps to determine the structural condition and the hydraulic capability of five dams on the Woonasquatucket River. The State was concerned that failure of these dams could cause dioxins in the sediments behind the dams to migrate downstream. In September 1999, New England District completed an inspection of the structural condition of the five dams. The dams were Lymensville, Manton, Atlantic Mills, Paragon and Rising Sun. The inspections showed that the dams are generally in fair condition and do not show signs of immediate danger of dam failure. However, all of the dams suffer from lack of maintenance and will continue to deteriorate if neglected. The assessments also determined that the spillway capacities of all five dams are inadequate based on Corps of Engineers hydrologic criteria for spillway design.